CLAIMS

I claim:

1. A head and neck immobilization device for preventing the movement of a cranial spinal column during radiation applications to the cranial spinal column, said device comprising:

a base having a first end, a second end, an upper surface and a lower surface;

a support frame being attached to and extending upwardly from said upper surface, said support frame being positioned generally adjacent to said first end of said base;

a mounting being positioned on said support frame and being selectively positioned between an upper portion of said support frame and a lower portion of said support frame;

a securing member being adapted for releasably securing said mounting to said frame in a fixed position; and

a head support being mounted to and extending outwardly away from said mounting, said head support including a face receiving member for receiving a head in a downward facing position.

2. The device of claim 1, wherein said support frame includes a plurality of vertically orientated columns.

3. The device of claim 2, wherein each of said columns has a plurality of apertures extending therethrough, each of said apertures being horizontally aligned with one of said apertures in each of said columns, each of said columns having at least three apertures extending therethrough, said securing member comprising a plurality of pins being removably extendable into through said mounting and into one of said apertures.

4. The device of claim 2, wherein each of said columns has a plurality of apertures extending therethrough, each of said apertures being horizontally aligned with one of said apertures in each of said columns, each of said columns having at least three apertures extending therethrough, said mounting comprising a plate having a plurality openings extending therethrough, each of said columns extending through one of said openings in said plate such that said plate is moveably mounted on said columns in a substantially horizontal orientation, said plate having a peripheral edge, each of plurality of bores extending into said peripheral edge and into one of said openings, wherein each of said bores may be selectively aligned with one of said apertures, said securing member including a plurality of pins, each of said pins being removably extendable into one of said bores and a correspondingly aligned one of said apertures.

5. The device of claim 3, wherein said plurality of columns includes four columns positioned in a generally rectangular configuration, a panel being attached to an upper end of each of columns.

6. The device of claim 4, wherein said plurality of columns includes four columns positioned in a generally rectangular configuration, a panel being attached to an upper end of each of columns.

7. The device of claim 4, wherein said head support includes an elongated rod having a first end and a second end, said first end being extended into plate such that said rod extends away from said plate in a substantially horizontal orientation and generally toward said second end of said base, a face holding assembly being pivotally coupled to and extending away from said second end of said rod.

8. The device of claim 7, wherein said face holding assembly includes a U-shaped member having a central portion and a pair of arms being attached to and extending away from said central portion, wherein said central portion is attached to said rod and is horizontally orientated, a flexible material being removably coupled to and extends along a length of said U-shaped member, wherein the head may be positioned between the arms and on said flexible material.

9. The device of claim 1, wherein said head support includes an elongated rod having a first end and a second end, said first end being extended into plate such that said rod extends away from said plate in a substantially horizontal orientation and generally toward said second end of said base, a face holding assembly being pivotally coupled to and extending away from said second end of said rod.

10. The device of claim 9, wherein said face holding assembly includes a U-shaped member having a central portion and a pair of arms being attached to and extending away from said central portion, wherein said central portion is attached to said rod and is horizontally orientated, a flexible material being removably coupled to and extends along a length of said U-shaped member, wherein the head may be positioned between the arms and on said flexible material.

11. The device of claim 3, wherein said head support includes an elongated rod having a first end and a second end, said first end being extended into plate such that said rod extends away from said plate in a substantially horizontal orientation and generally toward said second end of said base, a face holding assembly being pivotally coupled to and extending away from said second end of said rod.

12. The device of claim 11, wherein said face holding assembly includes a U-shaped member having a central portion and a pair of arms being attached to and extending away from said central portion, wherein said central portion is attached to said rod and is horizontally orientated, a flexible material being removably coupled to and extends along a length of said U-shaped member, wherein the head may be positioned between the arms and on said flexible material.

13. The device of claim 1, further including a platform being attached to said upper surface of said base such that said platform is spaced from said upper surface, said platform extending from said second end of said base toward said support frame, said platform being substantially horizontally orientated.

14. The device of claim 3, further including a platform being attached to said upper surface of said base such that said platform is spaced from said upper surface, said platform extending from said second end of said base toward said support frame, said platform being substantially horizontally orientated.

15. The device of claim 4, further including a platform being attached to said upper surface of said base such that said platform is spaced from said upper surface, said platform extending from said second end of said base toward said support frame, said platform being substantially horizontally orientated.

16. The device of claim 12, further including a platform being attached to said upper surface of said base such that said platform is spaced from said upper surface, said platform extending from said second

end of said base toward said support frame, said platform being substantially horizontally orientated.

17. A head and neck immobilization device for preventing the movement of a cranial spinal column during radiation applications to the cranial spinal column, said device comprising:

a base having a first end, a second end, an upper surface and a lower surface;

a support frame being attached to and extending upwardly from said upper surface, said support frame being positioned generally adjacent to said first end of said base, said support frame including a plurality of vertically orientated columns, each of said columns having a plurality of apertures extending therethrough, each of said apertures being horizontally aligned with one of said apertures in each of said columns, each of said columns having at least three apertures extending therethrough, said plurality of columns including four columns positioned in a generally rectangular configuration, a panel being attached to an upper end of each of columns;

a mounting being positioned on said support frame and being selectively positioned between an upper portion of said support frame and a lower portion of said support frame, said mounting comprising a plate having a plurality openings extending therethrough, each of said columns extending through one of said openings in said plate such that said plate is moveably mounted on said columns in a substantially horizontal orientation, said plate having a peripheral edge, each of plurality of bores extending into said peripheral edge and into one of said openings, wherein each of said bores may be selectively aligned with one of said apertures;

a securing member being adapted for releasably securing said mounting to said frame in a fixed position, said securing member including a plurality of pins, each of said pins being removably extendable into one of said bores and a correspondingly aligned one of said apertures;

a head support being mounted to and extending outwardly away from said mounting, said head support including a face receiving member for receiving a head in a downward facing position, said head support including;

an elongated rod having a first end and a second end, said first end being extended into and rotatably coupled to said plate such that said rod extends away from said plate in a substantially horizontal orientation and generally toward said second end of said base;

a face holding assembly being pivotally coupled to and extending away from said second end of said rod, said face holding assembly including a U-shaped member having a central portion and a pair of arms being attached to and extending away from said central portion, wherein said central portion is attached to said rod and is horizontally orientated, a flexible material being removably coupled to and extending along a length of said U-shaped member, wherein the head may be positioned between the arms on said flexible material; and

a platform being attached to said upper surface of said base such that said platform is spaced from said upper surface, said platform extending from said second end of said base toward said support frame, said platform being substantially horizontally orientated.